



## Montgomery County Forest Conservation Advisory Committee

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June 3, 2010

Ms. Lois Villemaire  
Project Manager, Zoning Re-Write Project  
Maryland-National Capital Parks and Planning Commission  
8787 Georgia Avenue  
Silver Spring, MD 20910

Dear Ms. Villemaire:

The Montgomery County Forest Conservation Advisory Committee is a standing 22-member public advisory committee charged with providing input to the County Executive and County Council on tree and forest conservation. Committee members have a broad range of professional and civic experience and expertise and consist of: members of the public, members of the building community, environmental organizations, civic organizations, public utilities, arbor-culture, landscape architecture and planning firms, and county agencies.

On behalf of our committee, I would like to thank you for briefing us on the county zoning re-write project at our May 25<sup>th</sup> meeting. We commend the work M-NCPPC is doing on this project, which is sorely needed. The committee appreciates the inclusion of a “Sustainability Audit” as part of the comprehensive review of the county’s zoning code, and we have reviewed the recommendations noted in the matrix on pages 83-85 of the *Zoning Montgomery Approach and Annotated Outline Report* dated February 15, 2010. In this letter, we provide our comments related to these recommendations. Recommendations from the report are below in red font. Our committee comments are in blue font followed by a separate bulleted section of our comments.

In general, we support the concepts and following recommendations from page 61 of the approach and outline report under the chapter heading for the Sustainability Audit:

“The Montgomery County Forest Conservation Law and Maryland State Forest Conservation Law currently have several provisions in place to protect existing tree canopy as well as champion and specimen trees in particular. **The county should continue to protect existing tree canopy, emphasizing the preservation of champion and specimen trees, where practicable.**

### Requiring New Trees

With regard to requiring the planting of new trees, the code audit found some areas of improvement. For example, street trees are currently coordinated between the Department of Permitting Services, Department of Transportation, and Planning Board staff. There is no specificity as to how many street trees are required per linear feet of frontage. **This process could be simplified by designating a standard number of street trees per linear feet of frontage, such as 1 street tree per every 40 feet, or any increment thereof that allows for the maximum number of trees to be planted. Such a requirement, in addition to other private parcel requirements, would add greatly to the canopy coverage of the county.**

## Healthy Trees

Requiring the planting of new trees is fruitless unless they are planted in a hospitable environment. Conventionally, trees in parking lots or parkways have faced 2 major challenges: a) they are planted in areas that are too small for them to grow; and b) they are surrounded by impervious surfaces, making it difficult for their roots to get sufficient irrigation. **It is recommended that the zoning code resolve these difficulties by a) increasing the required soil volume of tree planting areas (medians, parkways, islands) and b) requiring the use of new technologies, where practicable.**

**Committee comments:** Structural soil has significant limitations and our committee does not recommend its use. The greatest limitation being that it has so little actual soil in the mix. We suggest requiring a “minimum soil volume” through the use of soil vaults, soil trenches or structural cells. Increasing soil volume can now be accomplished below pavement. New technologies can add to sustainability and should be considered in an update of zoning codes and any recommended practices to increase tree canopy.

## Imperviousness and Reflectivity

Reducing unshaded imperviousness and reflectivity are central to reducing the heat island effect. Current code standards do not contain many standards related to the use of such materials as reflective pavement and roof surfaces, or the reduction of impervious coverage. **It is recommended that pavement and roof surfaces be required to have a level of reflectivity, and that the amount of impervious coverage is minimized to the extent practicable.”**

**Committee comment for this section:** Perhaps a basis for this effort would be to build on what LEED practices may already encourage.

### **FCAC Comments:**

The above recommendations are consistent with our discussions. On occasion, as our committee has reviewed several versions of proposed revisions and improvements to the county Forest Conservation Law (FCL), we have noted that zoning changes should match with the county goals for achieving sustainability. We have also discussed the linkages between tree cover and effective storm water management. We believe that requirements for increasing soil volume of tree planting areas to allow more room for growth of individual trees will enhance tree canopy. In addition, designating a standard number of street trees per linear feet of frontage is a practice that has been used successfully in other communities. Montgomery County would benefit from adding this provision to our zoning code.

We offer the following comments for the consideration of your department, the Planning Commission and the Council as the report relates to tree canopy and heat island in the “Sustainability Audit” section:

Under the ***Limit Tree Removal*** heading, the recommendation under the matrix on page 83 is:

**Continue to minimize tree removal and protect specimen/champion trees.**

### **FCAC Comments:**

This is consistent with the goals of our county FCL. However, we would like to point out that the report matrix has “tree ordinance” under the heading for “Code Section.” **Montgomery County does not have a county tree ordinance.** Our FCL was drafted in the early 1990s and addresses forests. While the current forest conservation compliance process addresses individual

tree protection via tree save and forest conservation plan approval in some situations, it is not a tree ordinance and should not be reflected as a law that is synonymous with protection of individual trees vs. tracts of forest as defined in the FCL. We recommend that tree preservation goals and forest conservation goals be adopted together so that they complement each other.

Under the ***Tree Protection*** heading, the recommendation under the matrix on page 83 is:

**Continue current tree protection practices.**

**FCAC Comments:**

We believe this is consistent with our goals in the FCL but note again that the FCL is not a “tree ordinance.” A tree ordinance or provisions for protection of individual trees should be explored as a supplement to the existing FCL.

Under the ***Specimen Tree Preservation*** heading, the recommendation under the matrix on page 83 is:

**Set fees for specimen/champion tree removal high enough to discourage their removal.**

**FCAC Comments:**

This recommendation is consistent with the revisions to the FCL proposed by DEP but we would like to point out that there are occasions when tree removal is warranted because of utilities easements or the unhealthy condition of a tree. Our committee has offered DEP feedback on its proposal. To be clear, the committee has not reached full consensus on the DEP proposal, and fees have not yet been established for tree removal. We have been told that legislation will be introduced this year to set these fees under a new approach to the FCL.

Under the ***Public Parking Credit Toward Parking Requirement*** heading, the recommendation under the matrix on page 83 is:

**Permit public parking spaces to count toward minimum parking requirement at a rate of 1 credit per 3 public parking spaces within 800’.**

**FCAC Comments:**

Our committee supports zoning that will allow for credits toward tree planting that will result in a higher rate of replanting.

Under the ***Parking Lot Tree Coverage (Shade)*** heading, the recommendation under the matrix on page 84 is:

**Increase minimum shade tree coverage to 30% of parking lot surfaces to the extent practicable**

**FCAC Comments:**

Our committee supports setting a minimum requirement for shade tree coverage on parking lot surfaces as long as the layout and design of a specific parking lot remain functional and meet other requirements of the zoning code.

Under the ***Street Trees*** heading, the recommendation under the matrix on page 84 is:

**Require 1 tree for every 40’ of street tree frontage with a minimum of 1 street tree per street tree frontage.**

**FCAC Comments:**

The committee supports this as a minimum but encourages M-NCPPC to explore requiring more than one tree for every 40' of street tree frontage, particularly in areas where we have had significant losses of forests and trees in urban sections of the county. At a minimum, the language should require 1 street tree for every 40 linear feet of frontage, *or increment thereof*. 41 to 80 linear feet of frontage would require two street trees at a minimum, 81 to 120 linear feet of frontage would require would require three street trees at a minimum, and so on.

Under the ***Private Parcel Tree Canopy*** heading, the recommendation under the matrix on page 85 is:

**Require a level of tree canopy coverage for all parcels.**

**FCAC Comments:**

We support this recommendation, which is consistent with discussions in our committee regarding the need for Montgomery County to set goals for a healthy tree canopy as part of strengthening the FCL and/or establishing a tree ordinance for the county.

Under the ***Healthy Trees: Tree Survival Measures*** heading, the recommendation under the matrix on page 85 is:

**Require the use of structural soil for all areas within half the diameter of the mature dripline of a tree when those areas are paved with impervious or semi-pervious materials. Require trees to be planted in islands, medians, or parkways of sufficient width to encourage long lived trees (minimum 9' width). Require a certain percentage of permeable pavement to increase stormwater filtration to tree roots.**

**FCAC Comments:**

Our committee fully supports the use of best practices and new technologies that will allow for better survival rates for trees. However, as noted on page 2 of this letter, we do not recommend the use of structural soil because of its limitations. Planting trees in islands, medians or parkways and increasing filtration to tree roots will result in healthier trees and a more livable and attractive community. Our committee would like to note that care should be given so that trees are planted within islands or medians as a means of stormwater management so that tree planting and other stormwater structures requiring larger islands (in parking lots for example) are not positioned on the same island or median. Creating larger islands or medians to accommodate both trees *and* stormwater management could result in an unintended consequence of greater loss of trees around the perimeter of a developed site.

In addition to our comments referencing specific sections of the *Zoning Montgomery Approach and Annotated Outline Report*, our committee offers your project team the following input:

- There should be an emphasis in zoning for dense development around transit centers. The report suggests that zoning code could be revised to require or at least permit higher residential density near transit stations. Our committee members believe that zoning should promote dense development and the ability to cluster development to protect forests. Since our county is about 97% built out, calling for a continued pattern of infill development and redevelopment, zoning must accommodate this as well as design of attractive landscaping plans (including tree protection or re-planting) to complement these residential and commercial projects. In general, houses should be clustered on sections of property where there are no trees. Zoning should address these changes in

county development patterns and land use. Any such efforts should be coordinated with input from stormwater management plan authorities to ensure there are no hindrances to obtaining approval for plans implementing Environmental Site Design (ESD) to the Maximum Extent Practicable (MEP) as dictated by state statute and local ordinance.

- A county tree ordinance, if drafted and adopted, might include requirements for replanting new trees, preserving mature trees, and requirements for creating attractive green spaces in and around dense infill and redevelopment. Examples of how density and green space can be executed successfully in land use and along streets and rights of way can be found in Vancouver, British Columbia, or Charlotte, NC where there is a strong municipal tree ordinance in place. A few photos from Vancouver and Charlotte follow.

**Vancouver:**



**A few aerial views from densely developed sections of Charlotte, NC:**



- Current mandated street widths and easements that require forest clearing should be updated to promote an increase in tree canopy in Montgomery County.
- Most of the future development will be infill and redevelopment where forest but not canopy has already been cleared. Unfortunately, a zoning change might allow the same density where a large portion of the property is in an environmentally sensitive area; this should be avoided. Improving the zoning code should also include relating infill development to existing buildings.
- Consideration should be given to setback spaces and the use of FAR (floor area ratio) as noted in the Zoning Discovery document presented to the Council. Regulating the size and bulk of a building through the use of FAR and setback requirements will increase the chances of preserving mature trees on lots. This is common in the county's commercial zones but has not been used to a large extent in residential zones. Buildings should be compatible with their lot size and adjacent buildings. Using floor area limits as a strategy in residential building will enhance sustainability and result in wider setback spaces.
- Flexibility in setback spaces should be included in an updated zoning code, particularly in R-60 zones where lots are small. Given the option of saving mature trees wherever

possible, most builders would choose to do so because builders are aware that residential and commercial areas where there is mature tree cover will translate to higher selling or leasing prices on projects. However, there are instances where rigid setback requirements have taken precedence over tree preservation. Allowing flexibility in setbacks and expedited review of projects where special consideration (or waivers) might result in tree-save measures is recommended by our committee.

- There should be flexibility in allowing the use of new technologies and this should be written into county zoning. New technologies can add to sustainability and should be considered in an update of zoning codes. Examples include planting boxes located under the pavement and permeable pavement for driveways and other surfaces.
- Environmental site design must be considered in rewritten zoning codes. Technologies and zoning changes should be compatible with what is included in the county's MS4 permit. We encourage the zoning re-write team to ensure that zoning should include tree preservation in the right of way and in storm water management areas. An example of incompatibility would be taking out trees in order to install storm water management structures. (See also our comment in the first bullet.)
- Construction practices during building should be part of sustainable development and included in Forest Conservation Plans and the zoning code. There should be zoning requirements to protect the critical root zones of existing trees on adjacent properties.

Thank you for the opportunity to comment on this phase of the zoning re-write project. Eliminating the outdated patchwork of Zoning Text Amendments that have come to represent our zoning codes is a step in the right direction, along with adding a sustainability component to zoning code.

We hope that our elected and appointed officials will vote to incorporate concepts into the re-written zoning code that will allow for more flexibility, sustainable development, and consideration of changes in development patterns and county demographics in the near future.

Sincerely,

/s/ Caren Madsen  
Chair, Montgomery County Forest Conservation Advisory Committee

Cc: The Honorable Isiah Leggett, County Executive  
Montgomery County Councilmembers  
Dr. Royce Hanson, M-NCPPC  
Bob Hoyt, DEP